UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,951	07/14/2003	David S. Abdallah	PRIV-004/02US 307640-2030	6422

22903 7590 12/17/2007		EXAMINER
COOLEY GODWARD KRONISH LLP ATTN: PATENT GROUP Suite 1100 777 - 6th Street, NW WASHINGTON, DC 20001		JOHNS, CHRISTOPHER C

ART UNIT	PAPER NUMBER
4172	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>21 November 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-9 and 20-37</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-9 and 20-37</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>14 July 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>11/21/2007, 9/11/2003</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I, namely claims 1-9 and 20, in the

reply filed on 11/21/2007 is acknowledged.

Rule 105 Requirement

Applicant and the assignee of this application are required under 37 CFR 1.105

to provide the following information that the examiner has determined is reasonably

necessary to the examination of this application.

The information is required to enter in the record the art suggested by the

applicant as relevant to this examination in the Information Disclosure Statement. The

current IDS contains 104 items, some of which are irrelevant to any possible

permutation of the disclosure's contents. For example, items 5, 6, and 7 on the first IDS

sheet (submitted with original disclosure) is "information which is material to

patentability as defined in 37 CFR 1.56" (MPEP §609). 37 CFR 1.97(h)

notwithstanding, the Examiner is confused as to how an "Undercut self-cutting dowel", a

"Process for preparing D-alloisoleucine", and an "Ink transfer volume measuring

assembly" are related to the disclosure at hand. Many other references are only

tangentially related to the art in question. The Examiner questions whether the length of

the list is an effort to bury references pertinent to patentability, while still satisfying the

duty to disclose.

In response to this requirement, please provide the title, citation and copy of each

publication that is a source used for the description of the prior art in the disclosure. For

each publication, please provide a **concise explanation of that publication's contribution to the description of the prior art**.

This requirement is an attachment of the enclosed Office action. A complete reply to the enclosed Office action must include a complete reply to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action.

Claim Objections

Claim 29 objected to because of the following informalities: the word "of" should appear between "including at least one", and "a biometric information of the user". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 28 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation of "enrollment authority" has no antecedent basis in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6-9, and 20 rejected under 35 U.S.C. 102(b) as being anticipated by

EncrypTix.

As per claim 1, EncrypTix teaches:
- at least one institution for researching and recording an identity and at least one travel privilege for individuals (see "Airline tickets get a makeover – slowly" (hereafter referred to as "Makeover"), 4th paragraph);
- at least one database maintained by the institution for associating identified individuals' names, an assigned asymmetric key pair, and the at least one travel privilege (see Makeover, 4th, 5th, 6th, and 7th paragraphs; "ADVISORY/Wireless Networks Often Insecure" (hereafter referred to as "ADVISORY"), 2nd paragraph – the Vice President of EncrypTix, at the time, was leading "the application development of security and hardware, including a Public Key Infrastructure (PKI)")
- said at least one travel privilege including at least one destination restriction, at least one date and time restriction, at least one mode of transportation restriction, at least one operator restriction, and an expiration date for each at least one travel privilege (inherent in the definition of travel ticketing – tickets inherently state when a passenger may travel, how they may travel, what time the traveling will take place, etc.);
- at least one travel privilege certificate associated with the at least one travel privilege and further associated with an identified individual (see Makeover, 4th paragraph).
- and at least one personal identification device including a means for enrolling and authenticating individuals and managing travel privilege certificates (customers would inherently have to sign up for such a service to use it. See Makeover, 4th paragraph).

As per claim 2, EncrypTix teaches
- a name field, comprising the identified individual's full name, a date field, comprising a date when the identified individual is allowed to travel, a time field, comprising a time when the identified individual is allowed to travel, a mode of transportation field, comprising a list of the modes of transportation that the identified individual is allowed to employ, a type of privilege field, comprising the type of privilege signified by the travel privilege certificate, an issue date field, comprising the date when the travel privilege certificate is issued, an expiration date field, comprising the date when the travel privilege certificate is no longer valid, a unique serial number (all of these are inherently stored on typical airline tickets, boarding passes, and other transportation vouchers. Therefore, to implement the system described by EncrypTix, the system inherently would need the same information);
- a digital signature created by the issuer of the travel privilege certificate (see ADVISORY, 2nd paragraph).

As per claim 3, EncrypTix teaches:

- the list of the modes of transportation includes at least one mode selected from the group consisting of a train, a bus, a car, an airplane and a ship (see Makeover, 4th paragraph).

As per claim 4, EncrypTix teaches:
- the type of privilege is selected from the group consisting of a reservation ticket, a boarding pass, a port-of-entry permission and a vehicle operator permission (see Makeover, 4th paragraph).

As per claim 6, EncrypTix teaches:
- first download means for downloading at least one travel privilege certificate to said personal identification device, transmission means for transmitting at least one travel privilege certificate from said personal identification device, recording means for recording at least one notable event on said personal identification device, first storage means for storing at least one travel privilege certificate on said personal identification device (see Makeover, 4th, 7th, 8th, and 9th paragraphs; "A Hatching Ground", page 4, bottom half; "EncrypTix points to paper future" (hereafter referred to as "Paper Future"), 3rd and 5th paragraphs);
- second storage means for storing at least one application audit log on said personal identification device (inherent to the art of programs).

As per claim 7, EncrypTix teaches:

- verification means for verifying an individual's personal identity prior to issuing the travel privilege certificate (inherent to the art of travel ticketing, the identity must be confirmed before a ticket it issued);
- second download means for downloading a computing mechanism onto the personal identification device, and third download means for downloading a digital certificate and asymmetric key pair for the individual into the personal identification device (inherent to the art of computing and programs);

As per claim 20, EncrypTix teaches:
- a means for collecting identification information for each traveling individual, wherein the collected identification information includes at least one biometric characteristic for the individual, a means for verifying the collected identification information (see Makeover, 4th paragraph. Written signatures are inherent in the acceptance of documents (e.g. airline tickets) and are therefore usable identification information. When a customer checks into a flight, for example, it is inherent in the art to verify that the information given is valid, through a variety of means);
- a means for determining at least one travel privilege for the traveling individual, a means for creating an electronic travel privilege certificate based on the determined at least one travel privilege, a personal identification device, a means for transmitting the electronic travel privilege certificate to the personal identification device, and a means for reading the electronic travel privilege certificate from the personal

identification device as necessary during the traveling individual's travel (see Makeover, 4th, 5th, and 7th paragraphs; Paper Future, 3rd and 5th paragraphs. Since the user's device contains the ticket it could be checked later as well).

Claims 8 and 9 rejected under 35 U.S.C. 102(b) as anticipated by or, in the

alternative, under 35 U.S.C. 103(a) as obvious over EncrypTix.

As per claim 8, EncrypTix teaches:

- authenticating the individual to the personal identification device (see Hatching Ground, page 4, bottom half – "demonstrated how a movie ticket could be reserved and paid for with a Palm VII device and **billed to a credit card account**" – alternatively, it was well-known to those skilled in the art at the time of the invention to require authentication, see "Handbook for the Palm III Organizer". Therefore, it would have been obvious to one skilled in the art at the time of the invention to require authentication of the user before allowing purchases to be made, in order to enhance security and to give tickets only to those authorized to accept them);
- verifying the date-of-validity of a stored digital certificate (inherent to the art of ticketing);
- accessing a database of enrolled individuals, associated privileges, and public keys, and verifying the individual's ownership of the private key, viewing the individual's assigned privileges in the database (necessary to enable the system described in EncrypTix);
- determining if the individual has at least one of any pre-existing notations, restrictions and provisos preventing the requested action, determining additional, action-specific notations, restrictions and provisos (inherent to the art of travel);
- creating a travel privilege certificate, receiving the travel privilege certificate, and storing the travel privilege certificate (see Paper Future, 3rd and 5th paragraphs).

As per claim 9, EncrypTix teaches:

- authenticating the individual to the personal identification device (see Hatching Ground, page 4, bottom half – "demonstrated how a movie ticket could be reserved and paid for with a Palm VII device and **billed to a credit card account**" – alternatively, alternatively, it was well-known to those skilled in the art at the time of the invention to require authentication, see "Handbook for the Palm III Organizer". Therefore, it would have been obvious to one skilled in the art at the time of the invention to require authentication of the user before allowing purchases to be made, in order to enhance security and to give tickets only to those authorized to accept them);
- verifying the date-of-validity of a stored digital certificate (inherent to the art of ticketing);

- accessing a database of enrolled individuals, associated privileges, and public keys, and verifying the individual's ownership of the private key (necessary to enable the system described in EncrypTix);
- selecting the at least one travel privilege certificate for transmission (see Makeover, 7th paragraph);
- digitally signing the at least one travel privilege certificate with a stored private key (see ADVISORY, 2nd paragraph);
- transmitting the signed travel privilege certificate (see Makeover, 7th paragraph).

Claims 21, 23-26, and 28 rejected under 35 U.S.C. 102(b) as being anticipated

by EyeTicket.

As per claim 21, EyeTicket teaches:
- code comprising code to: authenticate, at a personal identification device, a biometric input from a user based on a biometric template stored at the personal identification device and associated with the user, and send a request for a travel permission information from the personal identification device when the biometric input from the user is authenticated (see "Iris scans take off at airports" (hereafter referred to as Iris), page 1, 1st paragraph, and 5th paragraph through page 2, 2nd paragraph).

As per claim 23, EyeTicket teaches:
- the request includes the biometric input from the user (see Iris, page 1, 1st paragraph and 5th paragraph through page 2, 2nd paragraph).

As per claim 24, EyeTicket teaches:
- code to: send an admission ticket information associated with the travel permission information when the biometric input from the user is authenticated (see Iris, page 1, 1st paragraph and 5th paragraph through page 2, 2nd paragraph).

As per claim 25, EyeTicket teaches:
- travel permission information is associated with an admission ticket of a travel provider (travel permission information is inherently equal to the boarding pass).

As per claim 26, EyeTicket teaches:
- travel permission information includes at least one of a time restriction, a mode of transportation restriction, a destination restriction, a date restriction, an operator restriction, and an expiration date restriction (a boarding pass inherently contains restrictions on when, where, and how a passenger may travel).

As per claim 28, EyeTicket teaches:
- code to enroll the biometric template at an enrollment authority before the biometric input from the user is authenticated (see Iris, page 2, 1st and 2nd paragraphs).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 22, 27, and 29-37 rejected under 35 U.S.C. 103(a) as being unpatentable

over EyeTicket.

As per claim 22, EyeTicket teaches:
- code to: receive the biometric input from the user before the biometric input from the user is authenticated, the biometric input being at least one of a fingerprint information of the user, a retinal information of the user and an image information of the user (see Iris, page 1, 1st paragraph and 5th paragraph through page 2, 2nd paragraph. While Iris disclaims usage of the retinal information, it would have been obvious to one skilled in the art at the time of the invention to use a retinal scan. Though the technology is more invasive, it is another easily-substituted type of scan).

As per claim 27, EyeTicket teaches:
- travel permission information is encrypted based on an asymmetric key pair associated with a travel governing authority (it would have been obvious to one skilled in the art at the time of the invention to encrypt the travel information using public key cryptography, for added security).

As per claim 29, EyeTicket teaches:
- request including at least one a biometric information of the user or an authentication of the biometric information, and send the travel permission information associated with the user when the biometric information is authenticated, the travel permission information being encrypted based on an asymmetric key pair (see Iris, page 1, 1st paragraph and 5th paragraph through page 2, 2nd paragraph. While Iris disclaims usage of the retinal information, it would have been obvious to one skilled in the art at the time of the invention to use a retinal scan. Though the technology is more invasive it is another easily-substituted type of scan).

As per claim 30, EyeTicket teaches:
- produce the travel permission information based on the biometric information of the user before the travel permission information is sent (see Iris, page 1, 1st paragraph

and 5th paragraph through page 2, 2nd paragraph).

As per claim 31, EyeTicket teaches:
- code to: obtain the travel permission information associated with the user from a database before the travel permission information is sent, the database including at least one personal identity credential for each user from a plurality of users, each user from the plurality of users being associated with at least one travel permission information (see Iris, page 1, 1st paragraph and 5th paragraph through page 2, 2nd paragraph).

As per claim 32, EyeTicket teaches:
- code to: authenticate, before the travel permission information is sent, the biometric information of the user (see Iris, page 1, 1st paragraph and 5th paragraph through page 2, 2nd paragraph).

As per claim 33, EyeTicket teaches:
- request includes the biometric information of the user (see Iris, page 1, 1st paragraph and 5th paragraph through page 2, 2nd paragraph).

As per claim 34, EyeTicket teaches:
- code to: receive the fingerprint information of the user before the travel permission information is sent, and authenticate, before the travel permission information is sent, the fingerprint information of the user (see Iris, page 1, 1st paragraph and 5th paragraph through page 2, 2nd paragraph).

As per claim 35, EyeTicket teaches:
- travel permission information is sent to the personal identification device of the user (see "EyeTicket Corporation Introduces Digital Travel Solutions" (press release, hereafter referred to as Digital Travel), 2nd paragraph).

As per claim 36, EyeTicket teaches:
- code to: receive the travel permission information from an enrollment authority before the travel permission information is sent (see Iris, page 1, 1st paragraph and 5th paragraph through page 2, 2nd paragraph).

As per claim 37, EyeTicket teaches:
- travel permission information includes at least one of a time restriction, a mode of transportation restriction, a destination restriction, a date restriction, an operator restriction, and an expiration date restriction (a boarding pass inherently contains restrictions on when, where, and how a passenger may travel).

    Claim 5 rejected under 35 U.S.C. 103(a) as being unpatentable over EncrypTix in

view of Official Notice.

As per claim 5, EncrypTix teaches:

- collecting a digital representation of the individual's handwritten signature, collecting a digital photograph of the individual's face, collecting a digital fingerprint template of the individual's fingerprint, collecting personal identification credentials from the individual, including a birth certificate and a social security number (The Examiner takes Official Notice that these are all inherent and well-known in the art of travel, ticketing, and identity verification – see, for example, "Air travel: how safe?", paragraphs 3-6; "DOT forms response teams for air travel security", page 3; and "Have correct documents before departing" for examples);
- verifying the identity of the individual by the following steps: submitting the collected digital fingerprint template to the Federal Department of Criminal Justice database for review, submitting the collected birth certificate to the National Association of Public Health Services Information System database for review, submitting the collected social security number to the social security number database for review, submitting the individual's name and the collected social security number to the Immigration and Naturalization Service database for review, submitting the individual's name and the collected digital photograph to a database of already-enrolled individuals' names and photographs for review (The Examiner takes Official Notice that it would have been obvious to one skilled in the art at the time of the invention to submit unverified identification information to send the collected data to the appropriate organizations, in order to further verify the individual's identification. Furthermore, see "Air travel: how safe?", paragraphs 3-6, which discusses other airlines' security processes);
- determining if the individual is authorized to travel, determining authorized destinations for the individual, determining authorized travel times and durations for the individual, determining authorized modes of transportation for the individual (all of this information is inherently stored on the boarding pass, and may thus be verified);
- creating a digital certificate and an asymmetric key pair for the individual, and adding the individual's name, the collected digital photograph, public key, a date-of-validity, and the determined privileges to the database of already-enrolled individuals (it has been established that the system in EncrypTix stores all of the information of the enrolled passenger, since the system must use the information to verify the individual when the individual wishes to travel. It is not explicitly stated that a digital key is used in EncrypTix, but see ADVISORY, 2nd paragraph).

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

- Internet Archive's Wayback Machine archive of Eyeticket.com, archived December 2000. Covers the system included in the above rejection.

- "The Eyes Have It", an article from 2003 covering past implementations of the EyeTicket system.

- "Iris recognition at airports uses eye-catching technology", an article from CNN dated July 2000. Covers the EyeTicket system in more detail.

- "E Is For Eventually", article from Entrepreneur, dated March 2001, covers the future of electronic ticketing, mentions EyeTicket.

- "Business Travel", from The New York Times, dated October 1996. Covers American Airlines AAccess, a system with a smart card that allows for ticket less identification and boarding pass printing.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to CHRISTOPHER C. JOHNS whose telephone number is

(571)270-3462. The examiner can normally be reached on Monday-Thursday, 7:30-5,

Alternate Fridays, 7:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tom Dixon can be reached on 571-272-6803. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher Johns/   Christopher Johns
Examiner, Art Unit 4172   Examiner
                                                              Art Unit 4172
/THOMAS A DIXON/
Supervisory Patent Examiner, Art Unit 4172